CAPILANO	CAPILANO UNIVERSITY  COURSE OUTLINE		
UNIVERSITY	Course Title	Curriculum: Numeracy in the early years	
Course Number	EDUC 384	Credits	3.0
Section Number		Instructor	
Term	Fall 2016	Office	
Phone		Local	

#### **COURSE FORMAT:**

Three hours offered either by lecture or mixed mode, plus additional fourth hour activities each week over 15 weeks. Fourth hour activities will be delivered in a variety of ways. Instructions for fourth hour activities will be distributed during the first class

**COURSE PREREQUISITE:** 30 credits of 100 level or higher course work and ENGL 100.

# **EARLY CHILDHOOD CARE & EDUCATION DEPARTMENT VISION STATEMENT:**

The ECCE diploma / degree program fosters intellectual curiosity and critical thinking relevant to advocacy and leadership in early childhood education careers, advanced study, and lifelong learning.

#### **LEARNING OUTCOMES:**

#### General:

Based on the philosophy that play provides the foundation for children's growth and development, this experiential workshop course focuses on learning environments, curriculum planning, and teaching strategies that support children's engagement with concepts of numeracy. The course will focus on how young children use and understand mathematics in everyday life, in their play and in their daily living.

# **INSTRUCTIONAL OUTCOMES:**

Students who successfully complete this course should be able to:

- 1. Demonstrate an understanding of the connection between literacy and numeracy in the early years
- 2. Demonstrate an understanding of the BC kindergarten and Early Learning Framework's perspectives on early numeracy
- 3. Support and sustain children's active engagement with numeracy through play and multiple forms of expression
- 4. Plan, implement and evaluate materials and activities/experiences/explorations that support children's engagement with mathematical concepts
- 5. Critically examine various early childhood education philosophies as they pertain to early numeracy.

# Course Reading Package will consist of a variety of readings from the following list: (\* denotes possible course textbook)

Anders, Y., & Rossbach, H. (2015). Preschool Teachers' Sensitivity to Mathematics in Children's Play: The Influence of Math-Related School Experiences, Emotional Attitudes, and Pedagogical Beliefs. *Journal of Research in Childhood Education*, 29(3), 305. doi:10.1080/02568543.2015.1040564

# B.C. Early Learning Framework

- Habegger, L. (2010). Number Concept and Rhythmic Response in Early Childhood. *Music Education Research*, *12*(3), 269-280.
- Linder, S., Powers-Costello, B., & Stegelin, D. (2011). Mathematics in Early Childhood: Research-Based Rationale and Practical Strategies. *Early Childhood Education Journal*, *39*(1), 29. doi:10.1007/s10643-010-0437-6
- McGuinness, C., Sproule, L., Bojke, C., Trew, K., & Walsh, G. (2014). Impact of a Play-Based Curriculum in the First Two Years of Primary School: Literacy and Numeracy Outcomes over Seven Years. *British Educational Research Journal*, 40(5), 772-795.
- Ollerenshaw, A. (2012). Literacy Trails: A whole-of-community program to encourage literacy and numeracy awareness for children in preschool and early primary. *Australasian Journal of Early Childhood*, *37*(3), 147.
- Özdoğan, E. (2011). Play, mathematic and mathematical play in early childhood education. *Procedia Social and Behavioral Sciences*, *15*(3rd World Conference on Educational Sciences 2011), 3118-3120. doi:10.1016/j.sbspro.2011.04.256
- Sumpter, L., & Hedefalk, M. (2015). Preschool children's collective mathematical reasoning during free outdoor play. *Journal of Mathematical Behavior*, *39*1-10. doi:10.1016/j.jmathb.2015.03.006
- Skwarchuk, S., Sowinski, C., & LeFevre, J. (2014). Formal and informal home learning activities in relation to children's early numeracy and literacy skills: The development of a home numeracy model. *Journal of Experimental Child Psychology*, *121*63-84. doi:10.1016/j.jecp.2013.11.006
- \*Tucker, K. (2014). Mathematics through play in the early years. Sage publishing
- Wager, A., & Parks, A. (2014) Learning mathematics through play. In: Brooker, L, Blaise, M., & Edwards, S. *The SAGE handbook of play and learning in early childhood.* LA: Sage Publishing

#### **Course Content:**

Weeks	Content		
One	Introduction, course assignments and course outline		
Two	Literacy and numeracy: How are they connected. Understanding symbol		
	systems. Emergent literacy and literacy as social practice and how they		
	connect to the acquisition of numeracy.		
Three	BC's Early Learning Framework and Kindergarten I.R.P. and what they say		
	about early numeracy		
Four	Engagement with numeracy as a full-body, kinesthetic experience		
Five	Numeracy in art and play		
Six	Numeracy in art and play continued		
Seven	Numeracy in play continued		

Eight	Numeracy in music	
Nine	Numeracy in nature	
Ten	Numeracy in environmental print and in our day to day surroundings	
Eleven	Numeracy through, and in, storytelling	
Twelve	Perspectives on numeracy: Waldorf education	
Thirteen	Perspectives on numeracy: Montessori education	
Fourteen &	Group presentations	
Fifteen (Exam		
Period)		

# **EVALUATION PROFILE**

Reading responses (8x5%)	40% (8x5%)	
Group presentation	15%	
Individual Inquiry project	20%	
Ideas and concepts journal	<u>25%</u>	

**TOTAL** 100%

# **GRADING PROFILE:**

A+ = 90 - 100	B+ = 77 – 79	C+ = 67 – 69	D = 50-59
A = 85 – 89	B = 73 – 76	C = 63 – 66	F = 49 and below
A- = 80 – 84	B- = 70 – 72	C- = 60 – 62	

See Attached. Please note it is strongly recommended that students make a copy of all assignments in the event than an assignment is

**ASSIGNMENTS:** 

misplaced.

#### **OPERATIONAL DETAILS**

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Cheating and Plagiarism, Academic Probation and other educational issues. These and other policies are available on the University website

#### Attendance

Attendance is essential for the successful completion of this course. In the event of an absence from class, the student will inform the course instructor.

A student who misses 10% of classes may not receive credit for this course.

## Punctuality

Punctuality is essential given the professional nature of this program.

Lateness will be assessed in the same way as attendance. Being late for more than 10% of classes will result in the student not receiving credit for this course.

Academic Responsibility

Each student is responsible for the material covered in class and for any work required for the following class. If a student misses a class, they have the responsibility to contact a peer and obtain the notes, handouts and work for future classes.

The quality of work should provide both adequate depth and breadth so as to demonstrate a commitment to your professional development and that the competencies required of the course have been successfully met

#### Professionalism

All students are expected to maintain professional behaviour, as laid out in the ECEBC's Code of Ethics, while participating in this course. This pertains to <u>all students</u>, registered for this course.

## Missed presentations, exams, quizzes

Students will be allowed to make up in-class assignments, presentations, projects, exams, and quizzes under the following conditions:

If a doctor's certificate of illness is provided; or, in the case of the death of a close family member, a death certificate is provided.

# Late Assignments

All assignments are due at the beginning of the class on the due date. Late assignments will receive a 5% deduction in grade for each day they are overdue.

# **Incomplete Grades**

"I" Grades will be given only when prior arrangement has been made in writing between the instructor and the student specifying the exact nature of the work to be done and the date it is to be received.

# English Usage and Writing Style

All assignments are marked for correct English usage, proofreading, and formatting. At the instructor's discretion, any assignment not reaching these standards may be returned for revision and resubmission. Maximum grade assigned for a revised assignment is a "C".

All assignments will adhere to APA stylistic guide for avoiding bias in language use and will be written in a manner that reflects the spirit and values inherent in the ECEBC Code of Ethics and the BC Early Learning Framework. At the instructor's discretion, any assignment not reaching these standards may be returned for revision and resubmission. Maximum grade assigned for a revised assignment is a "C".

## Cheating & Plagiarism

Cheating is an act of deceit, fraud, distortion of the truth, or improper use of another person's effort to obtain an academic advantage.

Plagiarism is the presentation of another person's or source's words and/or ideas as if they were one's own. It ranges from an entire assignment which is not the student's own work to specific passages within an assignment taken from a source without appropriate acknowledgement.

Students are responsible for ensuring that they understand and follow the principles of proper documentation and scholarship. If in doubt about these matters, students should consult their instructor, the Writing Centre, or the Library. Students are responsible for ensuring that they understand what constitutes cheating and plagiarism and that these violations of proper academic practice have serious consequences

The instructor has the right to assign a grade of "0" on the examination or assignment, or, at the instructor's discretion, a letter grade "F" / No Credit on the course.

Second incidents of cheating or plagiarism, or first incidents deemed by a department/instructor to be particularly serious, will be dealt with according to the University policy available on the University website.

Please read the emergency procedures posted on the wall of the classroom.